

A PUBLICATION OF THE TENNESSEE DEPARTMENT OF LABOR & WORKFORCE DEVELOPMENT

What Kills in Tennessee?

During the calendar year of 2003, TOSHA investigated 34 workplace fatalities. These tragedies are summarized as follows:

Type of Incident	Number	% of Total
Struck-by	11	32
Falls	11	32
Crushed by/between	5	15
Electrocution	3	9
Burns	2	6
Drowning	1	3
Heat stroke	1	3
Total	34	

Six of the 11 fatalities in the struck by category occurred when employees were struck by trees or tree limbs. A worker was struck by a damaged power pole he was attempting to replace. One employee was struck by a bundle of replacement ceiling tiles being lifted onto a scaffold and one by a shifting crank-up scaffold. The final two were stuck by a tractor and a broken pulley bracket. As described in the spring 2004 edition of this newsletter, struck-by injuries are a leading cause of injury to employees throughout the Southeast.

Another 11 employees in Tennessee lost their lives due to falls in their workplaces. In 2003 two employees fell from scaffolds and two fell from work platforms. Three fatalities involved roof work when employees fell through a hole in a roof, from a roof parapet, and off an extension ladder being used to access a roof. One employee fell from an elevated work platform lifted by an off-road forklift when the forklift shifted while positioned on sloping ground. Two employees climbed into unsafe positions, one atop a road grader he was cleaning and the other onto an overhead crane to repair a light that was not working. One employee fell from a flat bed trailer after freeing himself from a trapped position and tripping over some chains. The height from which employees fell ranged from five to 45 feet.

Employees were crushed by a dump truck body, a bundle of lumber, an overturned road compactor, and overturned forklifts. All three electrocutions involved contact with overhead power lines. Two firefighters were killed by burns and smoke inhalation when they were trapped inside a burning building while fighting a fire. The other burn fatality occurred as the result of a welding fire. One employee drowned when he fell from a dock at a marina and one suffered heat stroke while digging a ditch in the summer sun.

What's New?

IN THE TENNESSEE LEGISLATURE

Two bills affecting TOSHA laws were recently passed by the Tennessee legislature and signed by the governor. Both amend provisions of the Tennessee Code Annotated to afford protections for Tennessee's public and private sector employees not previously available.

"The name, job title, and other information that may be used to identify a witness who is interviewed during the course of an investigation" will be held confidential by TOSHA. Previously, Tennessee laws concerning release of information from TOSHA files afforded no provisions for

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Lockout/Tagout Summary and Reminder

Hazards associated with the unexpected start-up or movement of machines and equipment can result in severe injuries and fatalities. Many of the machines and production equipment in use today are complex and highly automated. Specific procedures must be developed and followed to bring this equipment to a zero energy state and render it safe for maintenance and repair.

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Lockout/Tagout Summary and Reminder

The lockout/tag-out standard (1910.147) outlines programs and procedures that must be followed to protect workers from the hazard of unexpected start-up.

The following are key steps the employer must meet:

- 1) Develop a written Energy Control Program detailing responsibilities, procedures, training and periodic inspections to ensure equipment is de-energized before maintenance and servicing is performed.
- 2) Develop machine-specific procedures that identify the source and magnitude of the energy present, specific steps to control or eliminate all sources of energy, and steps to test the status of the equipment after lockout to assure it reaches a zero-energy state.
- 3) Train employees as either affected (those working in the general area) and/or authorized (those actually performing the maintenance and repair) in all areas required, as outlined in 1910.147(c)(6).



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4) Perform periodic inspections, at least annually, to identify any deviations or inadequacies.

What's New?

(Continued from Page One)

protecting the identity of witnesses. Copies of TOSHA files and other information released under Tennessee's Open Records Act will now have that information redacted before release to the public.

In addition, discrimination protection has been extended to Tennessee's public sector employees. The protection is now identical to that traditionally afforded private sector employees. Public or private sector employees who feel they have been discharged or in any manner discriminated against by their employer because of action they took under the TOSHA act may file a discrimination complaint with TOSHA within 30 days after the violation occurs. TOSHA will investigate to determine if a violation has occurred.

Last, local governments not already a part of TOSHA's public sector program have until July 1, 2006, to enter the program. Local governments wishing to become part of public sector must develop a safety and health program and file it with TOSHA's public sector office. Those governments agencies that are not part of the public sector program will be treated like private employers when an inspection occurs and may be assessed monetary penalties when violations of TOSHA standards and regulations are found. For more information about TOSHA's public sector, contact Ron Rich at 615-741-7179.

THE CLOSING CONFERENCE

At the conclusion of the walkaround, the compliance officer conducts a closing conference with the employer and the employee representatives. A joint conference with all participants is preferable, but a separate conference may be held if necessary. The closing conference may be conducted on-site or by telephone as deemed appropriate by TOSHA.

During the closing conference, the compliance officer describes the apparent violations of TOSHA standards and regulations found during the inspection. Both the employer and employee representative are advised of their rights to participate in any subsequent conferences, meetings or discussions and their rights to contest the citations, abatement dates, and monetary penalties.

For each apparent violation found during the inspection, the compliance officer will discuss the nature of the violation, possible abatement (correction) measures, and abatement dates. To minimize exposure of employees to potentially hazardous conditions, employers are strongly urged to begin the corrective action immediately. The employer is informed of all hazards that may be referred to another compliance officer or another agency for evaluation at a later date.

The compliance officer also fully explains the following:

- What the employer must do following the receipt of a citation
- How to request an informal conference
- How to contest the citation, the abatement date, and/or monetary penalties
- How to pay the penalties
- How to document corrective action
- How to request additional time for correction of the violation
- Possibility of a follow-up inspection
- How to get abatement assistance from TOSHA's Consultation Services Program
- Availability of TOSHA's training seminars
- Prohibition of discriminating against employees who have exercised their rights under the TOSHA law
- The rights of employee representatives with respect to contestments, modifications of abatement dates, and discrimination protection

A copy of the TOSHA Closing Conference Guide summarizing these items is provided to all participants. It is also available on TOSHA's web site.

Summer Temperatures Heating Up

By mid-May temperatures in middle Tennessee were already approaching 90 degrees. Remember that when the body is unable to cool itself through sweating, serious heat-related illnesses can occur. Sweating is effective only if the humidity level is low enough to permit evaporation and if the bodily fluids and salts lost are adequately replaced. If the body cannot dispose of excess heat, it will store it. When this happens, the body's core temperature rises and the heart rate increases. As the body continues to store heat, the individual begins to lose concentration and has difficulty focusing on a task, may become irritable or sick and often loses the desire to drink. The next stage is most often fainting. Death is possible if the person is not removed from the heat stress.

There are several steps that can be taken to reduce the risk of heat stress, such as moving to a cooler place, reducing the work pace or load, removing or loosening clothing, and drinking cool water frequently. If a heat-related condition is suspected, remember that it is very important to act immediately. If heat exhaustion is not treated quickly, it can lead to heat stroke and death. For ways to prevent it and ways to treat it, go to **www.osha.gov**, click on "H" in the alphabetical index, and then on Heat Stroke. A link is also available from TOSHA's web site. Heat stroke is no joke. Take it seriously this summer and protect workers who must work outside.

TOSHA TIPS

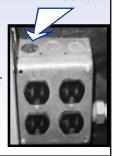
Condition: An unused opening in an electrical box, cabinet, or fitting was not effectively closed

Potential Effects: Electric shock, burns, and electrocution from contact with live parts

Citation: 29 CFR 1910.305(b)(1)

Recommended Action:

Use "knock-out closures" or other listed or labeled devices to close unused openings.





EARN & LIVE

A TOSHA CASE FILE SUMMARY



A 50-year old employee was killed when he was caught in a shrink wrap machine. The ring wrapper was being used to wrap pallets by a cycle of wrapping the pallet, cutting the plastic wrap, and moving the pallet to the next station. However, on this day the machine was wrapping the pallets,

but not completing the cycle by moving the wrapped pallet to the next station. After several calls to the maintenance department, two employees attempted to adjust the ring wrapper from the control panel and to manually adjust the electric sensor reflectors. These attempts were made from outside the cage around the wrapper and away from the point of operation. Later the victim entered the caged area, and, while standing in the point of operation, attempted to make an adjustment. While doing this, he accidentally triggered the electric sensors, setting the mechanism in motion. He was crushed between the wrapping mechanism and the rollers.

To prevent such an incident from happening:

- 1. Ensure that the energy control procedures clearly and specifically outline the scope, purpose, authorization, rules, and techniques to be utilized for the control of hazardous energy, including specific procedural steps for shutting down, isolating, blocking, and securing machines or equipment to control hazardous energy. (See 1910.147)
- 2. Provide adequate training to ensure that employees acquire the knowledge and skills required for the safe application, usage, and removal of energy control devices.
- 3. Ensure that authorized employees affix lockout or tagout devices to each energy isolating device.
- 4. Provide machine guarding to protect operator(s) and other employees from hazard(s) created by moving and rotating parts.

"Together with TOSHA"

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